PanReac AppliChem ITW Reagents

PRODUCT CODE: 221091

Methanol (Reag. Ph. Eur.) for HPLC gradient / UHPLC supergradient, ACS

CH_4O

CH_3OH

M.= 32,04 CAS [67-56-1] EINECS 200-659-6

TARIC 2905 11 00 10

SYNONYMS: Carbinol, Methyl Alcohol

PHYSICAL DATA: liquid, Clear, Colourless, Miscible with water, alcohol, ether and methylene chloride • Hygroscopic • D 20/4 0,7915 • M.P.: -97,8 °C • B.P.: 64 - 65 °C • n20/D **:** 1,3292 • Flash P.:12 °C • Ign. T.:455 °C • Vap. press. (20 °C) 128 hPa • Viscosity 20 °C 0,52 mPa.s • D. M. 20 °C 1,7 Debye • Dielec. constant25 °C 32,6 • Evap. number (DIN 53170) 6,3 • Heat evap. 65 °C 1100 KJ/Kg • Satur. conc. 20 °C 166 g/m3 • Expl. limit5,5 %(V)44 %(V) •

BIBLIOGRAPHY: Merck Index **13,** 5.984 Sax **MDS**250 • Safety **2 , 2281 C** • Kühn-Birett **M** 10 • Ullmann **(5.)**5 , 212 • Beilstein **1 , 273 I , 131 II , 252 III ,1147 IV , 1127** • BRN 1098229 • ACS **XI** • ISO 6353/2-1983R - 18 , 25 • BP**.2021** • USP **-NF 37** • Ph. Eur. 5.2 , 3234 **10.0** (2020) 5.2 , 3234 • F.C.C **11 12** • Directive 88/344/E.C.E.92/115/E.C.E.94/52/EC97/60/EC (27/10/1997) 2009/32/CE • Royal Decree 472/1990 (6/4/1990) , 2667/1998 (11 /12/1998), 1101/2011 (22/7/2011) •

HAZARDOUS: C.E: 603-001-00-X • RTECS: PC 1400000 • LD50 oral rat 1.187 - 2.769 mg/kg • LC50 rat 128,2 mg/l / 4h • LD50 skn rbt 17.100 mg/kg • VLA-ED 200 ppm266 mg/m3



H: H225 • H331 • H311 • H301 • H370 •
P: P280 • P210 • P233 • P309 • P310 • P302+P352 • P501 •

TRANSPORT REGULATIONS: UN: 1230 • ADR: 3(6.1)/II • IMDG: 3(6.1)/II • IATA: 3(6.1)/II • PAX: 352 • CAO: 364 • (D/E) •
WEIGHT/VOLUME INFORMATION: 1l~0,792 kg 1kg~1,263 l

SPECIFICATIONS:

Minimum assay (G.C.)	99,9%

Identity :	
Identity	IR passes test
Density at 20/4	0,791-0,792
Suitability: for gradient acc. to ACS	passes test

Maximum limit of impurities

APHA colour	10
Acidity	0,0002 meq/g
Alkalinity	0,0002 meq/g
Insoluble matter in H2O	passes test
Non-volatile matter	0,0002 %
Reducing substance to KMnO4	passes test
Darkened substances by H2SO4	passes test
Carbonyl compounds (as CH3COCH3)	0,001%
Base line drift (235 nm)	15 mUA
Water (H2O)	0,03 %
Gradient at 235 nm	2 mUA
Gradient at 254 nm	1 mUA
Fluorescence at 254 nm (as quinine)	1 ppb
Fluorescence at 365 nm (as quinine)	0,5 ppb
UV Spectrum (1cm cell; Ref.: water):	
Transmittance at 205 (Cut off) nm	≥ 10 %
Transmittance at 210 nm	≥ 30 %
Transmittance at 220 nm	≥ 60 %
Transmittance at 230 nm	≥ 80 %
Transmittance at 240 nm	≥ 90 %
Transmittance at 260-400 nm	≥ 98 %

Data of interest in HPLC:	
Rohrschneider Polarity	5,1
Eluotropic value E° (Al2O3)	0,95
Sol. H2O in solv. at 20°C	miscible

Microfiltered product (0.2 µm) and bottled under nitrogen atmosphere.

Conforms to Methanol R1 and R2 according to Reag. Ph. Eur.